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FLARE STARS IN THE PLEIADES

Photographic monitoring observations in the Pleiades region have been continued at the Bulgarian National Astronomical Observatory.

The observations were made with the 20"/28" Schmidt telescope at Rojen during 1979 - 1981.

Table I gives the characteristic data of the observational material. The total effective time of observations amounts to 53^h20^m.

Table I

Telescope	Light	Time of exposures	Number of plates	Number of exposures	T _{eff}
20"/28"	U	10 ^{min}	30	163	27 ^h 10 ^m
"	Pg	10 ^{min}	26	156	<u>26 10</u>

Total = 53^h20^m

The data of observed flares are summarized in Table II.

Table II

Rojen N	HII	R.A. _{1900.0}	D _{1900.0}	^m / _{u/pg} min	^m / _{u/pg}	Date	Identification
R 12 ^x	134	3 ^h 37.7 ^m	23°55'	17.0 _u	0.5 _u	14.10.80	T 68
R 12	"	"	"	"	1.7 _u	29.11.81	"
R 13	-	3 ^h 37.9 ^m	25°09'	18.6 _u	2.6 _u	23.11.81	T 69
R 14 ^x	335	3 ^h 38.4 ^m	23°45'	16.0 _u	0.6 _u	17.10.81	T 73
R 15	-	3 ^h 41.6 ^m	22°04'	16.8 _u	2.6 _u	30.10.81	B 473
R 16	-	3 ^h 43.0 ^m	24°02'	17.7 _{pg}	1.7 _{pg}	22.09.79	B 476
R 17	-	3 ^h 43.6 ^m	23°37'	19.2 _{pg}	4.5 _{pg}	24.09.79	T 54
R 18	-	3 ^h 44.0 ^m	21°54'	18.8 _{pg}	3.3 _{pg}	17.09.79	-

^xFlares were discovered after the reexamination of the observational material published in our previous papers (IBVS No. 1749, IBVS No. 1888).

The successive columns give the following data:

1. Rojen designation. The numeration according M. Tsvetkov et al. (I.B.V.S. No. 1888) has been continued.
2. Hertzsprung number.
- 3-4. Coordinates for 1900.0.
- 5-6. Photographic magnitude at minimum and amplitude of the observed flare either in U- or pg- light.
7. Date of the flare event (U.T.).
8. Identification of the flare stars by the Tonantzintla (T) and the Byurakan (B) lists.

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